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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Uwe Horn

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EXAMINER

SHANG, ANNAN Q

ART UNIT

PAPER NUMBER

2424

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/780,416	Applicant(s) HORN ET AL.	
	Examiner ANNAN Q. SHANG	Art Unit 2424	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,6,8-10 and 12-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6,8-10 and 12-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 3, 5, 6, 8-10 and 12-36 have been considered but are moot in view of the new ground(s) of rejection.

With respect to the rejection of the last office action mailed on 06/24/08, Applicant amends claims and further argues that the prior arts of record do not teach the amended claim limitations (see page 11+ of Applicant Remarks).

In response, Examiner notes Applicant's arguments, however the Examiner disagrees. Kalra teaches all the claims limitations, but silent as to acquiring from a network control element, separate from the source and the receiver a value of one or more transmission condition parameters indicative of transmission conditions in the network. However, in the same field of endeavor, **Tso** discloses in figures 1-3, a system for dynamic transcoding data transmitted between computers based on various parameters including transmission condition parameter(s) where the transcoding server can part of server or stand alone server external to the source and the client, i.e., anywhere on the network and where the network is a wire/wireless network (figs.1-3 and col.3, line 8-col.4, line 37). Kalra as modified by Tso, teach dynamic transcoding data based on various transmission condition parameters between various communication clients, e.g., telephone network (wired or wireless), but silent as to a radio link and where the communication network is a mobile communication for processing of video data in one or more of a mobile station in the wireless communication network, where the processing of the video includes one or more

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handover conditions associated with handing over the mobile communication to a second cell coverage area, a base station in the wireless communication network, and where the information pertaining to one or more handover conditions includes information relating to a capacity of the second cell for adapting the coding or transcoding of video data in accordance with that information. However, in the same field of endeavor, **Sen** discloses a TCP-aware agent sublayer (TAS) for robust TCP over wireless where a wireless communication and processing of video data in one or more of a mobile station in the wireless communication network, where the processing of the video includes one or more handover conditions associated with handing over the mobile communication to a second cell coverage area, a base station in the wireless communication network (col.4, lines 20-35) and where the information pertaining to one or more handover conditions includes information relating to a capacity of the second cell for adapting the coding or transcoding of video data in accordance with that information (figs.1-3, col.4, line 20-35, col.6, line 11-41 and col.8, line 17-col.9, line 52) and further checks other conditions, such as available buffer space (col.9, lines 18-52). Hence the amended claims do not overcome the prior arts of record as discussed below. The amendment to the claims necessitated the new ground(s) of rejection. **This office action is made Final.**

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 5, 6, 8-10 and 12-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kalra et al (6,490,627)** in view of **Tso et al (6,421,733)** and further view of **Sen et al (6,208,620)**.

As to claim 1, note the **Kalra** reference figures 1-3 and 12-15, discloses method and apparatus that provides a scalable media delivery system and further disclose a method for controlling a processing of video data including coding or transcoding of video such that the video data may be transmitted over a connection in a communication network, the connection employing a plurality of protocol layers, the method including:

Performing (Adaptive Stream Server "ASS" 400, figs.1-3 and 12-15) the controlling of the processing of video at a first application layer (col.3, line 66-col.4, line 32, lines 60-65), acquiring a value of one or more transmission condition parameters indicative of transmission conditions in the network, where the one or more transmission condition parameters are specific for a second layer provided lower than the first layer, bandwidth availability, limitations, etc., (figs.12-15, col.10, line 46-col.11, line 1+, col.15, lines 5-56, col.16, line 61-col.17, line 1+ and col.26, line 47-col.27, line 16).

Deriving one or more values of one or more video control parameters from the value of the at least one transmission condition parameter, providing to the first application layer the derived one or more values, and performing at the first application layer the controlling of the processing of video data including coding or transcoding of

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video data in accordance with the derived one or more values (col.10, line 46-col.11, line 1+, col.15, lines 5-56, col.16, line 61-col.17, line 1+ and col.26, line 47-col.27, line 16).

Kalra is silent to acquiring from a network control element, separate from the source and the receiver a value of one or more transmission condition parameters indicative of transmission conditions in the network.

However, note the **Tso** reference figures 1-3, discloses system for dynamic transcoding data transmitted between computers based on various parameters including transmission condition parameter(s) where the transcoding server can part of server or stand alone server external to the source and the client, i.e., anywhere on the network and where the network is a wire/wireless network (figs.1-3 and col.3, line 8-col.4, line 37).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Tso into the system of Kalra to place the processing element or acquiring element within any of the devices (client system, server, gateway, etc.,) as desired to efficiently analysis the various parameter(s) and encode the multimedia data accordingly to met device specifications/preferences and capabilities.

Kalra as modified by Tso, teach dynamic transcoding data based on various transmission condition parameters between various communication clients, e.g., telephone network (wired or wireless), but silent as to a radio link and where the communication network is a mobile communication for processing of video data in one

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or more of a mobile station in the wireless communication network, where the processing of the video includes one or more handover conditions associated with handing over the mobile communication to a second cell coverage area, a base station in the wireless communication network, and where the information pertaining to one or more handover conditions includes information relating to a capacity of the second cell for adapting the coding or transcoding of video data in accordance with that information.

However, **Sen** discloses a TCP-aware agent sublayer (TAS) for robust TCP over wireless where a wireless communication and processing of video data in one or more of a mobile station in the wireless communication network, where the processing of the video includes one or more handover conditions associated with handing over the mobile communication to a second cell coverage area, a base station in the wireless communication network (col.4, lines 20-35) and where the information pertaining to one or more handover conditions includes information relating to a capacity of the second cell for adapting the coding or transcoding of video data in accordance with that information (figs.1-3, col.4, line 20-35, col.6, line 11-41 and col.8, line 17-col.9, line 52), note that the system checks other conditions, such as available buffer space (col.9, lines 18-52).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Kalra as modified by Tso with wireless communication network and base station(s), to provide cellular services to users, where the base station(s) processes data accordingly based on additional network conditions parameters and capacity of the various stations, and further account for handover conditions between cells, thereby efficiently process data to meet the network

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conditions, i.e., device capabilities/preference, bandwidth characteristics, base stations or servers capabilities, etc.

As to claims 2-3 and 5, Kalra further discloses a predetermined link and the one or more transmission condition parameters relate to a condition of the predetermined link, acquired at the second layer on a sending side of the link and where the second layer is a link layer (col.15, lines 5-56, col.16, line 61-col.17, line 1+ and col.26, line 47-col.27, line 16).

Claim 6 is met as previously discussed with respect to claim 1.

As to claims 8-10, Kalra further discloses where the processing of video comprises the forward error correction of the video data (col.10, line 46-col.11, line 45, col.13, line 5-50, line 59-col.14, line 58), packetization of the video data and where one or more transmission condition parameters are selected from a group consisting of the current transmission delay, the current transmission bandwidth allocated for a specific user, the current bit error rate and the current frame erasure rate (col.15, lines 5-56, col.16, line 61-col.17, line 1+ and col.26, line 47-col.27, line 16).

As to claims 12, Kalra further discloses where transmitting the video data in scalable form by having a base stratum and at least one enhancement stratum, and by deciding on the inclusion or exclusion of the enhancement stratum in the transmitted video data on the basis of the derived one or more values of the one or more video control parameters (figs.9a-c, col.3, line 66-col.4, line 32, col.5, line 57-col.6, line 26, col.10, lines 46-66 and col.15, lines 5-56).

As to claim 13, Kalra further discloses where transmitting the video data in scalable form by having at least two independent bitstreams of video and by selecting the at least two independent bitstreams on the basis of the derived one or more values of the one or more video control parameters, the selected bitstream being the transmitted video data (col.3, line 66-col.4, line 32, col.5, line 57-col.6, line 26, col.10, lines 46-66 and col.15, lines 5-56).

As to claims 14-15, the claimed "A program product loadable into a computer-readable memory for a digital computer device..." is composed of the same structural elements that were discussed with respect to the rejection of claim 1.

As to claim 16, the claimed "A transmitting system for transmitting video data over a connection..." is composed of the same structural elements that were discussed with respect to the rejection of claim 1.

Claims 17 and 20 are met as discussed above with respect to claims 2, 3 and 5.

Claims 18 and 19 are met as previously discussed with respect to claim 1.

Claim 21 is met as previously discussed with respect to claim 1.

As to claim 22, Kalra further discloses where the processing element, the acquisition element and the element for deriving values of the video control parameters are all provided in one unit (figs.1-3, 12-14, col.3, line 66-col.4, line 32 and col.16, lines 5-56).

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As to claim 23, Kalra further discloses where the acquisition element is provided in a different unit than the processing element (figs.1-3, 12-14, col.3, line 66-col.4, line 32 and col.16, lines 5-56).

Claim 24 is met as previously discussed with respect to claim 1.

As to claim 25, Kalra further discloses where the processing element is arranged to perform coding or transcoding of the video data (col.3, line 66-col.4, line 32, col.10, lines 46-67 and col.15, line 5+).

Claims 26-28 are met as previously discussed with respect to claims 8-10.

As to claim 29, Kalra as modified by Tso, teach all the claim limitation as previously discussed with respect to claim 18, but fails to explicitly teach the current-level on the radio link.

However, Official Notice is taken as to detecting the power-level of a radio link is well known means for controlling the transmission of data to ensure optimum transmission of data.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Kalra as modified by Tso to include the claimed limitation to ensure optimum transmission of data.

Claim 30 is met as previously discussed with respect to claim 12.

Claim 31 is met as previously discussed with respect to claim 13.

As to claim 32, the claimed "A transmitting system for transmitting video data over a connection..." is composed of the same structural elements that were discussed with respect to the rejection of claim 1.

As to claim 33, Kalra as modified by Tso, teach all the claim limitation has previously discussed with respect to claim 32, but fails to explicitly teach the claim limitations, which are met as previously discussed with respect to claim 4 and 6.

As to claim 34, Kalra as modified by Tso, teach all the claim limitation has previously discussed with respect to claim 4, but fails to explicitly teach the claim limitations, which are met as previously discussed with respect to claim 4 and 6

As to claim 35, Kalra as modified by Tso, teach all the claim limitation has previously discussed with respect to claim 16, but fails to explicitly teach the claim limitations, which are met as previously discussed with respect to claim 4 and 6

As to claim 36, Kalra as modified by Tso, teach all the claim limitation has previously discussed with respect to claim 32, but fails to explicitly teach the claim limitations, which are met as previously discussed with respect to claim 4 and 6.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Malmloff (6,594,241) discloses channel-type switching control.

Ohtani et al (2006/0128386) disclose mobile communication system, mobile station and diversity handover branch control method.

Kall et al (7,206,589) disclose method and device for handling a multimedia call.

Tilander (7,233,596) disclose switching method and apparatus.

Kil (7,433,686) discloses system and method for providing public/private mobile communication service.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q. Shang** whose telephone number is **571-272-7355**. The examiner can normally be reached on **700am-400pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Christopher S. Kelley** can be reached on **571-272-7331**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the **Electronic Business Center (EBC)** at **866-217-9197 (toll-free)**. If you would like assistance from a **USPTO Customer Service Representative** or access to the automated information system, call **800-786-9199 (IN USA OR CANADA)** or **571-272-1000**.

/Annan Q Shang/
Primary Examiner, Art Unit 2623

Annan Q. Shang

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